D&B Engineers and Architects, P.C.

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

*Division of Environmental Remediation*
*625 Broadway, 12th Floor, Albany, New York 12233*

## ACTIVE INDUSTRIAL UNIFORM SITE GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

Latitude 40.677°, Longitude -73.365°

## REPORT TITLE

Site Management Report - 2019

## REPORTING PERIOD

January 2019 - December 2019

## CLIENT

New York State Department of Environmental Conservation

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The following Site Management Report (SMR) presents a summary of all inspection, monitoring and maintenance activities completed at the NYSDEC Active Industrial Uniform Site (the Site) Groundwater Extraction and Treatment System (GWE&TS) during the period January 1, 2019 through December 31, 2019. The Site, which is located in the Town of Babylon, Suffolk County, New York, is the location of a former NYSDEC Class 2 Inactive Hazardous Waste Site and is listed on the New York State Registry of Inactive Hazardous Waste Sites. A Site Location Map is presented in **Figure 1**.

As detailed below, the Site was managed in conformance with the SMP throughout the 2019 reporting period, as such, corrective measures were not required to maintain the remedy. In addition to the summary below, all 2019 Site Management activities will also be formally documented, evaluated and certified as part of the 2018 - 2022 Periodic Review Report.

## *Summary of Site Management Activities:*

| Routine/ Inspection/ Monitoring/ Maintenance Item | Summary/Results | Non-Routine Maintenance/ Corrective Measures | Recommendation |
|---|---|---|---|
| Treatment System Operation and Maintenance | In accordance with recommendations in the Site Management Quarterly Reports, the NYSDEC directed that the GWE&TS be shutdown in November 2018 to facilitate recommended remedial system optimization (RSO) activities. As such, the GWE&TS was not operating this reporting period. | Non-routine maintenance/ corrective measures were not performed. | Continue monitoring groundwater sampling results to determine if the system needs to be restarted. Additionally, evaluate the completed RSO activities and associated data to determine the need for potentially modifying the configuration of the system to target remaining on-site contamination. |
| Non-Routine Maintenance Activities | As detailed below, some non-routine maintenance was completed on-site. Refer to Figure 2 for an "as-built" system layout diagram.<br>• On February 11, 2019, the NYSDEC Remedial Services Contractor performed surface restoration at the area previously disturbed by the completed effluent pipe repair work.<br>• On April 3, 2019 the NYSDEC Remedial Services Contractor and Verizon were on-site to connect the telemetry service lines. While on-site the NYSDEC Remedial Services Contractor pumped the groundwater sampling purge water through the system.<br>• On April 12, 2019, the NYSDEC Remedial Services Contractors were on-site to complete redevelopment activities for extraction well RW-2. While on-site attempts were made to clear sediment from RW-2 utilizing a vactor truck; however, due to faulty equipment and set-up, the vactor truck took water to capacity and was unable to complete the redevelopment. The NYSDEC Remedial Services Contractors returned to the Site to complete redevelopment activities at RW-2 on April 23, 2019. | Non-routine maintenance/ corrective measures were not performed. | Following the failed attempts to redevelopment RW-2, D&B recommends that the recovery well be abandoned and determine the need for replacement or potentially replace the extraction well with a monitoring well. |

| Routine/ Inspection/ Monitoring/ Maintenance Item | Summary/Results | Non-Routine Maintenance/ Corrective Measures | Recommendation |
|---|---|---|---|
| Non-Routine Maintenance Activities (continued) | While on-site several techniques to complete redevelopment and clear the sediment from the well were attempted; however, based on identified sediment remaining in the well, the on-site Foreman suspected an issue with the well construction such as damaged or failure of the well screen. Additionally, following the unsuccessful attempt to redevelop RW-2, a borescope camera inspection was performed to assess the integrity of the well with no anomalies observed; however, the borescope was not able to view beyond the bottom of the screen of the well.<br>• On September 27, 2019 the NYSDEC Remedial Services Contractor met with the Suffolk County Water Authority to provide access for the valve testing of the back-flow prevention device.<br>• On November 8, 2019, the NYSDEC Remedial Services Contractor was on-site to clear system alarm conditions and reset the autodialer phone numbers at the request of D&B. The alarm conditions were identified as false alarms and were cleared by the technician on-site.<br>The Site Activity and Maintenance Logs are presented in Appendix A. | | |
| Groundskeeping | Groundskeeping activities were completed in compliance with the SMP with some exceptions. Although no snow removal activities were reported during this reporting period, they are to be completed, as needed, to ensure facility access for site monitoring and sampling. The Site grounds are in good condition. The Site Activity and Maintenance Logs are presented in Appendix A. | Non-routine maintenance/ corrective measures were not performed. | Continue bi-weekly groundskeeping as specified in the SMP and any additional groundskeeping on an as-needed basis. |
| Site Access | The Site is located in a residential area on a dead-end street. Access to the Site from the street is in good condition. Site Activity and Maintenance Logs are presented in Appendix A. | Non-routine maintenance/ corrective measures were not performed. | Perform necessary maintenance to ensure continued access to the Site. |
| Monitoring Well Network | Site monitoring wells and extraction wells were inspected during each quarterly sampling event completed in this reporting period. All wells were in good condition, with the exception of missing locks. Monitoring well locks observed to have been missing in MW-4D and RW-2 in January 2019 and MW-103, MW-104, MW-105, MW-106 in May 2019. The Monitoring Well Field Inspection Forms are included in Appendix B. | Non-routine maintenance/ corrective measures were not performed. | Continue inspection of the site monitoring well network per the SMP. |

| Routine/ Inspection/ Monitoring/ Maintenance Item | Summary/Results | Non-Routine Maintenance/ Corrective Measures | Recommendation |
|---|---|---|---|
| Groundwater and Extraction Well Sampling Analysis | Groundwater monitoring wells and the recovery wells are sampled on the routine basis per the SMP. Select monitoring wells were sampled in January, April, July and October 2019 of this reporting period. Sampling of the monitoring well network was completed to determine groundwater quality at the leading edge of the groundwater plume and downgradient of the GWE&TS. The groundwater monitoring well network consists of ten on-site monitoring wells, one on-site recovery well, three off-site monitoring wells and one off-site recovery well. As the GWE&TS was shut down on November 30, 2018, recovery well RW-1 is sampled as part of the quarterly groundwater monitoring events during the July and October sampling events. On-site well locations are provided on Figure 3 and off-site well locations are provided as Figure 4.<br><br>Throughout this reporting period several groundwater monitoring wells exhibited concentrations of contaminants above their NYSDEC Class GA Standards. Total VOC contaminant concentrations in on-site monitoring wells were graphed to determine a two-year trend analysis. As indicated in Table 1, four of the ten on-site monitoring wells exhibited increasing total VOC trends, four monitoring wells exhibit stable total VOC trends and the remaining two exhibited decreasing total VOC trends. Throughout this reporting period total VOC concentrations in the ten on-site monitoring wells ranged from non-detect to 45,979 ug/l in January 2019. The two-year total VOC trend analysis for all ten on-site monitoring wells is based on the degree of slope exhibited by the best fit line across each Total VOC Concentration Graph, links are provided to each graph in Table 1.<br><br>As indicated above and in previous quarterly monitoring reports RW-1 was sampled on two occasions following the shutdown of the GWE&TS in November 2018. Both samples collected in July 2019 and October 2019 exhibited low detections for contaminants of concern. As only two sampling events were completed this reporting period a trend analysis was not completed for RW-1.<br><br>Off-site groundwater monitoring wells have exhibited varying trends for total VOCs over the last two-years. Total VOC concentrations for off-site monitoring wells throughout the last two-years ranged from non-detect to 2538.20 ug/l in July 2018. As indicated in Table 2, one of the four off-site monitoring wells exhibited an increasing total VOC trend, one exhibited a stable total VOC trend and two exhibited decreasing total VOC trends. The Site specific two-year total VOC trend analysis for all four monitored off-site wells is based on the degree of slope exhibited by the best fit line across each Total VOC Concentration Graph, links are provided to each graph in Table 2.<br><br>Analytical Summary Tables are presented in Appendix C and Data Validation Checklists are provided in Appendix D. | Non-routine maintenance/ corrective measures were not performed. | Continue groundwater and extraction well sampling events as specified in the SMP. |

| Routine/ Inspection/ Monitoring/ Maintenance Item | Summary/Results | Non-Routine Maintenance/ Corrective Measures | Recommendation |
|---|---|---|---|
| Cost Evaluation | As per the direction of the NYSDEC PM, a cost evaluation for this period was not performed. | --- | At this time there are no immediate recommendations for reducing the cost of site management activities at the Franklin Cleaners Site. |

## List of Appendices



## List of Figures



## List of Tables



## Report Certification:

I have personally examined and am familiar with the information submitted in this report. To the best of my knowledge and belief, and based upon my inquiry of those individuals immediately responsible for obtaining the information reported therein, I certify that the submitted information is true, accurate, and complete.

**Project Director:** Richard M. Walka — *Senior Vice President* — 2.21.20 **Date**

**Project Manager:** Carl Schmidlapp — *Project Manager* — 2/24/20 **Date**